

REMARKS

The Office Action mailed June 15, 2005 has been carefully considered along with the references cited therein. In the subject Office Action, the Examiner rejected claims 4, 5, 13-16 and 19 under 35 U.S.C. § 102(b) as being anticipated by Stankiewicz (U.S. Patent No. 4,964,993). Claims 1-6 and 11-19 stand rejected under § 103(a) as being unpatentable over Stankiewicz.

Since this response is to a final Office Action, Applicant has only made some slight modifications to the claims that do not require any further search by the Examiner. This response accompanies a Notice of Appeal.

Claims 1-3, 11 and 12

Claim 1 has been amended to correct a typographical error. In rejecting claim 1, the Examiner asserted that modifying the filter 43 in Stankiewicz to include a beveled end was an obvious design modification. To sustain the rejection, the Examiner points to MPEP § 2144.04(IV)(B) and *In re Dailey*, 149 USPQ 47. *Dailey* generally held that absent persuasive evidence that a particular configuration is significant, changes in shape are obvious. In Applicant's first response, Applicant stated that a beveled end can provide more surface area for the filter apparatus, which provides advantageous results. In response to Applicant's arguments, the Examiner indicated that the statements with regard to the improved properties to the filter are not persuasive because they have not been presented in proper declaration form and that arguments and conclusory statements alone are insufficient to establish new or unexpected results.

Applicant's apologize if the statements made in the previous response appear conclusory. In this response, Applicant's will attempt to more clearly explain the scientific grounds as to the significance of the beveled end as recited in claim 1, thereby differentiating the facts of the instant case with that of *Dailey*.

It is well known that, generally, the larger the surface area for a filter medium the greater the efficacy of the filter. Furthermore, it is shown in U.S. Patent No. 5,370,171, that dosing tubes, referred to as vacuum tube 6 in the '171 patent, are disposed at an angle other than vertical and that molten metal vessel bottoms are typically flat. Since dosing tubes are typically disposed at an angle other than vertical and molten metal vessel bottoms are typically flat, to increase the overall surface area of the apparatus in claim 1,

Applicant includes a beveled end opposite the mounting portion. By beveling the end, a filter body having a larger overall surface area can be accommodated between the end of the dosing tube and the bottom of the molten metal vessel. Such a modification is nowhere suggested in Stankiewicz. Accordingly, claim 1, and those claims depending from it, patentably define over Stankiewicz.

Dailey holds that absent persuasive evidence that the particular configuration of the claimed apparatus is significant, changes in shape are typically obvious. Applicant has provided sufficient evidence, i.e. the larger the surface area for a filter medium the greater the efficacy of the filter, that the beveled end of the apparatus in claim 1 is significant. Furthermore, this evidence is not merely conclusory or argumentative. Beveling the end of a body necessarily changes its surface area, as compared to a body that does not include a beveled end, for example the cylindrical filters disclosed in Stankiewicz. Accordingly, Applicant has provided sufficient evidence showing that the claimed configuration was significant such that the facts in *Dailey* are no longer sufficiently similar to those in the application under examination. See MPEP § 2144.

Claims 4 and 5

Claim 4 has been amended to include the limitation recited in claim 6 and therefore includes “a beveled end distal the attachment portion.” For the same reasons discussed above with regard to claim 1, claim 4 should be found patentable.

Claims 13-19

Claim 13 was rejected as being anticipated by Stankiewicz. Stankiewicz fails to disclose or suggest “a filter attached to the dosing tube.” The Examiner argues that Stankiewicz teaches an apparatus (43) for filtering molten metal in molten metal transport conduits, including dosing tubes in col. 3, lines 24-27. Col. 3, lines 24-27 state “[t]he assembly is susceptible of being mounted into a molten metal holding furnace or other means of molten metal transport such that the molten metal flow is introduced to the exterior of the close-ended cylindrical elements and the upper surface of the plate element.” The “other means of molten metal transport” does not suggest attaching a filter to a dosing tube. In the sentence preceding the sentence at col. 3, lines 24-27, Stankiewicz states that the filter element extends vertically above the elevation of the

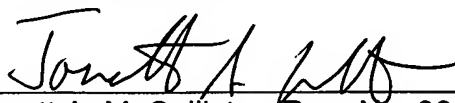
sealing plate. See col. 3, lines 17-24. In other words, the filter device in Stankiewicz relies on gravity to work. In contrast a dosing tube typically relies on a vacuum to work. Stankiewicz goes on to state "[t]he molten metal flows through the porous ceramic material of the cylindrical elements and preferably through the sealing plate element to be further flowed downstream, ultimately to the associated casting molds." Col. 3, lines 31-34. After considering this sentence, one skilled in the art would be led to think that the filter disclosed in Stankiewicz is spaced from the dosing tube, which delivers molten metal to a casting mold, as opposed to being attached to the dosing tube. Furthermore, each of the many different embodiments disclosed in Stankiewicz discloses the filter element mounted to a molten metal holding furnace, as opposed to attached to a dosing tube. Accordingly, Stankiewicz fails to disclose or even suggest each limitation recited in claim 13. Therefore, claims 13, and those that depend from claim 13, are believed to be patentable.

CONCLUSION

All formal and informal matters having been addressed, it is respectfully submitted that this application is in condition for allowance. Since this Amendment is being submitted after a final rejection, no new matters have been raised that would require further search or consideration. If the Examiner is of the view that the application is not in clear condition for allowance, it is requested that the Examiner telephone the undersigned for purposes of conducting a telephone interview to resolve any outstanding differences. An early notice of allowance is earnestly solicited.

Respectfully submitted,

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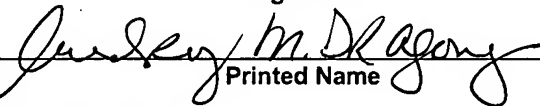
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September 15, 2005
Date

CERTIFICATE OF MAILING

Under 37 C.F.R. § 1.8, I certify that this Amendment is being

- ☒ deposited with the United States Postal Service as First Class mail, addressed to: MAIL STOP AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.
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